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ABSTRACT

In 1963 the National Council of Teachers of English published a major summary of research in composition, sometimes referred to as the Braddock Report, which included 24 questions that addressed areas in which further research was needed. This paper describes more than 100 published and unpublished reports of research conducted since the Braddock Report that provide information related to these 24 areas. The research deals with such aspects of composition as writing attitudes and achievement, writing topics preferred by students, the effect of reading on writing, effective instructional techniques, the effect of the study of linguistics and rhetorical theory on writing, the composition process, and specific skills involved in writing. (GW)

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Research in Written Composition: Fifteen Years of Investigation

Research in Written Composition: Fifteen Years of Investigation

In 1963, NCTE published Research in Written Composition, a monograph prepared by a special committee of NCTE and written by this committee's directors, Richard Braddock, Richard Lloyd-Jones, and Lowell Schoer.* This monograph was the first of a number of comprehensive research summaries published throughout the sixties and seventies (Meckel, 1963; Braddock, 1969; Sherwin, 1969; Blount, 1973; and Lundsteen, 1976), and stands as an important document for composition teachers, for directors of composition programs, and for researchers in composition. It is important because it was the first major summary of research to appear in over thirty years (Lyman, 1929). Also, it provided for the research novice a useful, though brief examination of the basic tools necessary for a critical scrutiny of research studies. Third, it heightened the professional and pedagogical awareness of composition teachers by demonstrating that research in composition exists, by discussing elements of design and measurement in layman's terms, and by providing information on composition research that could be implemented in the design of writing programs. Finally, it presented twenty-four recommendations for needed research in composition, many of which have been investigated in recent years. In addition, the Braddock Report has become a document highly regarded by subsequent research specialists. Nathan S. Blount (1973), for example, calls the Report an "indispensable source of information" (p. 1084), and "a classic monograph" (p. 1088).

The Braddock Report is indispensable not only for the information it presented on existing research and research methodology, but also for the information it called for in the twenty-four recommendations for needed research. These recommendations, which appeared in the form of questions, were as follows:

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* Hereafter referred to as the Braddock Report.

1. What kinds of situations and assignments at various levels of schooling stimulate a desire to write well?

2. What do different kinds of students prefer to write about when relieved of the expectations and requirements of teachers and others?

3. What are the sources of fear and resentment of writing?

4. How do the kinds of writing which adults compose vary with their occupations and other factors?

5. What is the effect on writing of having the student compose his paper for different kinds of readers?

6. At which levels of maturation does it seem appropriate to introduce the various modes of discourse--narration, poetry, drama, exposition, argument, and criticism?

7. What is the relative effectiveness of writing shorter and longer papers at various levels of maturity and proficiency?

8. At which levels of maturation does it seem appropriate to introduce the various rhetorical elements of writing?

9. What are the effects of various kinds and amounts of reading on the quality and kinds of writing a person does?

10. What are the direct and indirect effects of particular sensory experiences and guided observation upon writing?

11. At what stages of maturity do students spontaneously seek specific help in improving particular aspects of writing, such as specificity of details, transitions, parallel structure, and metaphor?

12. At which levels of maturation can particular aspects of writing most efficiently be learned?

13. Does the oral reading of rough drafts help the elementary school child strengthen "sentence sense"? How does it?

14. What techniques of composition most effectively help build self-discipline and pride in clarity, originality, and good form?

15. What procedures of teaching and learning composition are most effective for pupils of low socioeconomic patterns?

16. What procedures of teaching and learning composition are most effective for pupils learning to write English as a second language?

17. Can study of the newer types of linguistics help writers?

18. Can formal study of rhetorical theory or of logic help writers?

19. How is writing affected by extensive study and imitation or parody of models?

20. What forms of discourse have the greatest effect on other types of writing? For example, does writing poetry help a writer of reports?

21. What is involved in the act of writing?

22. How does a person go about starting a paper? What questions must he answer for himself?

23. How does a writer generate sentences?

24. Of what does skill in writing really consist?

These questions address specific and crucial areas in which research could provide essential insights into the nature of the writing process, the nature of the student learning to write, and the nature of pedagogical procedures which facilitate or retard the learning process. But, as the authors of the Braddock Report noted in 1963, these questions "which seem fundamental in the teaching and learning of written composition apparently have gone almost untouched by careful research" (p. 52). In this essay, therefore, I will examine the research which has been done since the Braddock Report in these twenty-four areas, research which may or may not be in direct response to these questions, but which nonetheless provides information relating to these crucial areas. In this regard, I will examine both published and unpublished research reports. While the published reports have proven their significance by professional recognition, the unpublished reports also present significant implications for the teaching and learning of composition. In addition, I will make further recommendations for more research which is needed in the field.

I should state three matters relating to the preparation of my overview. First, some of the questions posed in the Braddock Report deal with psychological matters which are very difficult for researchers to gauge. Question Fourteen, for example--"What techniques of composition most effectively help build self-discipline and pride in clarity, originality, and good form?"--asks the researcher to establish a relationship between technique and two psychological constructs--self-discipline and pride. While many research studies do investigate the relationships between techniques and improvement in such writing skills as clarity, originality, and form, few investigate what impact, if any, a technique has on mental faculties (or, for that matter, what impact mental faculties have on a technique). I will report on both types of studies--those which relate only to skills or achievement, and those which relate to mental faculties

(such as attitudes toward writing). The former studies base their conclusions on measures of achievement, which limits them to data derived strictly from demonstrable behavior. Still, they do suggest relationships between techniques and achievement which may generate further research into the psychological effects of these techniques.

A related matter pertains to the overlap of some questions. Question Twenty-One, for example--"What is involved in the act of writing?"--is closely related to question Twenty-Two--"How does a person go about starting a paper? What questions must he answer for himself?" In such instances, I will group overlapping questions together and report on research most closely related to both.

The third matter concerns the selective nature of this overview. It is selective in two senses. First, I have not included some studies simply because they do not relate to any of the questions posed in the Braddock Report. Thus, I have not reported such studies as that by McElwee (1974), who examined the effects of systematic instruction in proofreading on the spelling accuracy of fourth and sixth graders. Another example of a study which is interesting in itself but is not related to the Braddock Report's questions is the one by Norwood (1974), who conducted an experiment in teaching methodology to determine achievement as related to ethnic origin. In this overview, then, I have reported only on those studies which relate closely to the questions posed in the Braddock Report. Research dealing with such matters as spelling, ethnic origin, vocabulary, teacher preparation, and the like have not been included.

This overview is selective in a second sense. While I have investigated both published and unpublished research studies, I have eliminated some studies because of major flaws in design or procedure. Such as the case with one study which investigated whether students enrolled in a freshman composition course using an experimental method improved their writing after fifteen weeks of treatment. The data on the posttests indicated that there was improvement in writing ability, but since no control group was used, the researcher could not be sure if the improvement was a result of the experimental treatment or not. In another study, experimental and control groups were pre and posttested to determine the effects of teacher-corrected versus peer-corrected writing. But on the writing samples used as the posttest, rater reliability was so low that the writing samples had to be discarded. Scores on the objective posttest were not statistically significant, so the investigator "concluded" that there is no significant difference between the two methods of correcting student writing. Studies such as these are relatively insignificant or so egregiously flawed that they are hardly worth reporting.

In reporting on better designed and more significant studies, I will consider both procedures and results. Readers who wish to look further into these studies can easily obtain them either as published documents, or through University Microfilms, or ERIC Document Reproduction Service.

OVERVIEW OF RESEARCH

I. What kinds of situations and assignments at various levels of schooling stimulate a desire to write well?

14. What techniques of composition most effectively help build self-discipline and pride in clarity, originality, and good form?

These two questions deal with attitudes toward writing and also with achievement. Because there is little distinction between "kinds of situations and assignments" and "techniques of composition" and because a "desire to write well" necessarily involves "pride in clarity, originality, and good form," I will consider these questions together.

Hall, Moretz, and Storm (1976) studied home environments of children who were early writers in school in an attempt to identify what builds positive attitudes toward writing. From information collected through interviews with parents, the researchers found that most parents of early writers were college graduates who served as models for the children because they wrote in the home themselves; writing materials were easily accessible to the children, as were books, magazines, and newspapers; and parents often engaged in reading and often read to their children. The researchers identified three patterns in this early interest in writing: 1) desire to communicate to others through letters; 2) introduction to the names of letters and often direct instruction in writing; and 3) help given at the children's requests.

Many studies have been done on the effect of teacher criticism of student writing. In an overview of this research, Groff (1975) concluded that, contrary to popular belief, either positive or negative criticism of children's writing gets the same results. That is, the quality of children's writing is not affected by either positive or negative criticism. However, the effect of such criticism on attitudes toward writing is another matter. Gee (1970), for example, worked with 139 eleventh grade students in an investigation of the effects of written comment on expository composition. Students were assigned to three treatment groups: one group received positive comments, one group received negative comments, and one group received no comments at all. All of the students wrote four compositions. Before each writing, the previous composition was returned, with appropriate comments, or no comments. Measurement comparisons between the

first and fourth compositions were based on the number of T-units and on quality as determined by a rating scale. While Gee found no significant differences in the quality of student writing, he did find that comments of praise were more effffective than negative comments or no comments at all in promoting positive attitudes toward writing.

Stevens (1973), working with ninety-one low-performing urban male high school students for ten weeks, investigated what effect positive or negative evaluation has on the quality of writing and on the students' attitudes toward composition. Positive and negative evaluation groups were set up and students wrote five compositions during the study. Stevens found no difference in the quality of the compositions due to the effect of positive or negative evaluation, but he did find that positive evaluation creates positive attitudes while negative evaluation creates negative attitudes.

Other studies dealt with related kinds of feedback. Stiff (1967) investigated the effect of three correction methods on the writing of seventy-seven college freshman students. The three methods were: 1) marginal comments only; 2) terminal comments only; and 3) combined marginal and terminal comments. The results indicated improvement in all of the students' writing: there was no significant difference deriving from the method of correction. Stiff pointed out that this result would seem to indicate that the completely corrected paper and the amount of time invested in it may be no more productive than other procedures of correction which are less time consuming. However, Stiff also found that the students in the combined marginal/terminal correction group were more pleased with that method than the students in the other groups. The author thus suggested that, in the long run, this third method may have a positive effect on student morale and perhaps on performance.

Sweet (1966) examined other forms of teacher feedback in his six-week study involving 225 ninth graders. The three methods he employed were: 1) no comment, only a numerical score and letter grade; 2) free comment (whatever comment the teacher felt like making); and 3) specified comment (stock responses designated in advance for each letter grade, such as A = "Excellent! Keep it up," or C = "Perhaps try to do better"). The three feedback methods were applied to students' objective tests, rather than to actual writing samples which are usually used in experiments of this sort. But since Sweet's concern was with measuring the effects of feedback on performance generally, his results are nonetheless suggestive and applicable to actual writing. Students in all three groups demonstrated little short-term effects on test performance due to treatment. However, students in the free comment group did show a significant effect on

scholastic performance over a longer period of time. In addition, only the students in the free comment group showed a positive change in attitude toward English. The researcher called for replication of his study, but for a longer time interval to test the long-term effects of feedback on attitudes.

Farmer (1976) compared two methods of composition evaluation: 1) a method of correcting a student's theme in writing and returning it to him in class; and 2) an oral, individualized method where the instructor explained to the student the problems and weaknesses and helped the student in improving his weaknesses. Sixty freshman composition students were divided into two experimental and two control groups for one semester. Both groups followed the same class procedure, except for the evaluation methods. Writing was evaluated for content, organization, mechanics, and overall on a 1 - 5 scale. Results favored the individualized approach in the areas of organization, mechanics, and overall; for content, results also favored the individualized approach, though not at a level of statistical significance. Wagner's study (1975) investigated the impact of letter grading on student attitudes toward composition in freshman English. One group of students received letter grades on twelve compositions written during the course while the other group received none. Both groups received positive comment on all papers. The students were measured for attitude changes and for writing performance. Results showed that the presence or absence of letter grades, in the presence of positive comments, does not significantly affect change in attitude or writing performance. Wagner pointed out, however, that letter grading directs teacher remarks to the negative aspects of student work, which thus interferes with positive commentary.

Two researchers comparing different approaches to composition included in their data information on attitudes toward writing. Adams (1971) compared the effectiveness of two methods used in an elective pre-college course. Method A was a highly structured approach which used professional essays as models, limited topics for writing, prescribed forms of discourse and length, mechanical and structural errors marked by a grader, brief comments directed at errors on themes, and required revisions. Method B was described as flexible: models derived from students' writings; no restrictions on topics, form, or length; small-group work where students read one another's writing before turning in revisions for the teacher to read; themes evaluated by responding to students' thoughts and ideas while mechanical and structural errors went unmarked; and long and affirmative comments on papers. The results derived from the STEP (Sequential Test of Educational Progress) test of writing skills, as well as from evaluation of writing samples showed that no significant differences in writing skills existed

between students from either group. There were significant differences, however, in attitudes toward the methods: both teachers and students in method B were more enthusiastic toward the end of the semester. This study represents two extremes in methodologies; and, though many uncontrolled variables in each method weaken the design, the attitudinal results do suggest that certain elements in method B may increase motivation in students at this level.

In another experiment, Wahlberg (1970) explored a method of structuring the freshman composition classroom to affect student attitude and improve the learning climate. The control group followed a teacher-centered lecture format; the experimental group followed a peer-interaction format with a college counselor intervening to show students ways to help one another. While the results show mixed improvement for both groups, the students in the intervention group felt that more learning took place and that the instructor "cared" for them. Similarly, Salvner (1977) developed a rationale for collaborative learning in composition and described a study done with ninth and tenth graders for six weeks. While there was no significant difference in overall quality in the writing of students who experienced the collaborative writing unit, the researcher found that attitudes toward writing improved, and that students spent more time in prewriting and writing as a result of their experiences in collaborative learning.

A number of methodological experiments in prewriting techniques have been done. While I intend to report the bulk of these experiments under Question Eighteen (below), one study must be reported here because along with testing the effectiveness of prewriting techniques, it also gathered data on attitudes. Rohman and Wlecke (1964) worked with students in a college-level sophomore expository writing course for one semester. The procedure followed in the experimental group was a six-week unit with the focus on concept formation in the prewriting process (stress on the need for experience and thought before the actual writing). The control group followed a traditional basic composition format: formal study of grammar, logic, and rhetoric; analysis of model essays; and weekly essays with revision. Post-treatment themes were rated significantly higher in favor of the experimental group. Equally important, however, was the data gathered on attitudes. Where the control group by the end of the course saw writing as an extrinsic problem (concern with mechanics, spelling, rules of good writing behavior), the experimental group saw writing as an intrinsic problem (concern with the value of ideas, thinking, and conceptualization). The authors concluded that as a result of their experiences in this course, the experimental students saw writing as a more worthwhile, more desirable activity.

Other comparative methodological studies were concerned less with attitudes and more with achievement. Troyka (1973) investigated the effect of simulation-gaming (role-playing) on the expository prose competence of community college remedial composition students. The researcher set up an experimental group which was given simulation-based writing experiences focusing on basic rhetorical skills (development by facts, by reason, by incidents, and by comparison/contrast). The control group was given similar assignments but did not experience simulation-gaming. The experimental group achieved significantly higher scores than the control group on two measures of writing ability--the STEP section on English Expression, and a rating scale used to evaluate the themes. Troyka concluded that the experimental treatment not only improved expository writing competence but also proved to be an effective motivational strategy.

Some studies compared writing labs/workshops with more traditional approaches. Haas, Childers, Babbit, and Dylla (1972) used 142 freshman composition students for one semester to investigate the effectiveness of an experimental workshop method which made use of intensive in-class guidance of daily writing assignments, peer-group problem solving of writing tasks, and condensed descriptions of rhetorical techniques. The control group followed a format based on lectures on rhetorical strategies and discussions of readings from an anthology. In their results, the researchers found that the experimental workshop groups showed superior achievement over the control groups on writing samples rated for rhetorical technique, structure, mechanics, and content.

In a similar experiment, Sutton and Arnold (1974) worked with 244 freshmen who scored on the lowest decile on the English Scale of the ACT. The purpose of this study was to compare the long-term effects of a writing lab with those of a regular remedial English course upon the achievement and the attrition rate of the students. Students in the writing lab experienced much intensive tutoring while those in the regular course followed a lecture-discussion format. Both groups used programmed texts in spelling, diction, and writing. The researchers found that the writing lab students fared better in their other courses and that the individualized instruction of the writing lab methodology had a significant effect on the future writing grades of these students. Two other experiments with writing labs arrived at less significant results. Turner (1970) worked with three sections of junior college English to determine whether or not the substitution of a writing lab for a regular class would improve student writing. Two control groups and one experimental group were set up with evaluation based on judges' ranking of final compositions in the course. The results showed

that the experimental writing lab group performed slightly better but not at a level of significance. Dow (1973) had similar results with another group of college students. One hundred and forty-six students were divided into experimental and control groups. The experimental groups were assigned to a writing lab which was characterized by an informal atmosphere, attractive environment, non-compulsory assignments, non-mandatory attendance, ungraded writing, and extensive student-teacher conferences. The control groups followed a more structured procedure: a formal classroom setting, reading and writing assignments, graded writing, grammar study, research papers, and examinations. Evaluation of both groups consisted of a writing skills test, a test of exposition, and a writing sample evaluated by four raters using an evaluation sheet. Dow found that the students in both groups wrote equally as well.

Closely related to experiments with writing labs are those which examine the effects of class size and/or individualized instruction. Smith (1974) worked with high school juniors to investigate the hypothesis that the teaching of writing can be improved through individualized and small group instruction. The researcher used twelve classes. Six were large-class control groups which received instruction directed to each group as a whole. Among the other six classes were groups which also received instruction directed to the entire group but with smaller class size, and groups which received individualized instruction. Smith found that the students in smaller classes made greater gains in knowledge of writing skills and in writing performance than those in the larger classes and that students of low and average achievement improved more than did students of high achievement. She also found that students in the individualized instruction groups made even greater improvement than those in small classes. An important part of the Smith study was a check on retention of skills six weeks after the experiment: post-experimental testing showed no retention in knowledge of writing skills or in writing performance for students in large classes. Students in small classes showed retention in knowledge of writing skills but no retention in writing performance. Students in the individualized instruction groups showed retention both in knowledge of writing skills and also in writing performance six weeks after the experiment.

Laguna (1972) examined an instructional method which employed individualization (diagnostic tests and teacher-student conferences) and peer grouping (students in each peer group chose writing topics, set objectives, and evaluated their writing). The control group operated on a whole-class basis, with the objectives set by the teacher, who also evaluated all writing. The subjects were 60 tenth

grade students. Evaluation was based on the STEP writing test and the STEP essay test. Laguna found that peer evaluation was as effective as teacher corrections and that it reduced the time expended in evaluation by the teacher. With peer evaluation, students completed more composition while they received more immediate feedback on their writing. And finally, [illegible]n progressed at their own rate in acquiring composition skills without repeating previous learning.

In a related study, Ford (1973) investigated the effects of peer-editing and grading of themes on the grammar-usage and theme-writing ability of freshman English students. He found that having students edit and grade each others' themes can cause significantly greater gains in their grammar-usage as well as in their theme-composition ability than having just the course instructor edit and grade the students' writing. Similarly, Farrell (1977) used 154 junior high students for a twelve week study comparing three approaches to teaching writing: 1) teacher lecture; 2) peer evaluation; and 3) group tutoring. Student writing was assessed by the STEP Test, and by a writing sample rated by the Diederich Composition Rating Scale. Farrell found that generally both peer evaluation and group tutoring had better effects on writing skills.

In an experiment using sixth graders, Sager (1973) investigated whether children who were taught to use a rating scale (composed of four sections on vocabulary, elaboration, organization, and structure) to rate their own compositions and those of their peers would improve the quality of their writing more than students who studied the four criteria of the rating scale but did not use it in evaluating their work. The researcher found that the students using the scale to rate their own work as well as that of their peers did improve the quality of their writing more than did the students who did not use the scale.

Another kind of methodological experiment involved programmed instruction. Slay (1968) compared the effectiveness of programmed, formal, and informal approaches to the teaching of grammar in remedial college English. The programmed group used a programmed grammar text; the formal group used formal grammar instruction with a traditional handbook; and the informal group replaced formal grammar instruction with teacher-led discussions of students' writing, along with samples of student writing presented on an overhead projector. The researcher found no significant differences in writing skills among the three groups. Harris (1972) examined the learning effectiveness and cost-time efficiency of programmed instruction for teaching expository writing to college freshmen and high school seniors. Programmed instruction included integrated instructional sequence, behavioral objectives and student knowledge of objectives, cybernetic feedback, and self-instruction. Harris found programmed instruction effective for teaching

some high-level cognitive processes (analyzing informative discourse) and as effective as conventional methods for teaching the analysis and production of discourse which emphasizes logical proof. He also found programmed instruction efficient in terms of cost and time.

In an extension of the Rohman and Wlecke study (1964, see above), Burhans (1968) added to the focus on prewriting a stress on writing techniques and structural methods. Three approaches to a college level sophomore composition course were compared. The prewriting group emphasized prewriting and rewriting; the "comprehensive" group emphasized prewriting, writing techniques (e.g., abstract and concrete language, figurative language, analogy, and exemplification), structural methods (development of paragraphs and essays), and rewriting; the "traditional" group emphasized logic, rhetoric, and mechanics. In addition, the prewriting and comprehensive groups were student-centered and developmental (i.e., from prewriting and writing stages to full essays) while the traditional group was material-centered and static (i.e., begin with full essays). Burhans found that students in the prewriting and comprehensive groups produced writing superior to that produced by students in the traditional group. While students in the prewriting and comprehensive groups showed measureable gains in the areas of wording, flavor, ideas, and organization, none of the three groups proved superior in the improvement of mechanics.

Two experiments were concerned strictly with revision. Hansen (1971) investigated whether university students who do teacher-guided revision and rewriting of an essay achieve greater skill in composition than students who correct mechanical and grammatical errors with only the aid of a handbook and who do not revise or rewrite. For the self-guided students, then, revision was strictly a matter of proof-reading. In addition, students in the self-guided group wrote more themes without revision, while the students in the teacher-guided group wrote fewer themes but revised each into new themes. The results led Hansen to conclude that there is no assurance that a student who writes four themes and revises each into a new theme will improve any more than another student who writes twice as many themes and makes a correction sheet for each. The researcher also concluded that editing skills are evidently learned in some way other than through revising and rewriting. This study suggests that if students once understand just what needs to be revised, the actual physical act of revision may be unnecessary.

In another study of revision, Effros (1973) worked with ten college freshman composition sections. The experimental groups' procedure was designed to motivate students to revise and rewrite by delaying grades until revisions were

completed. The control groups, on the other hand, used minor revision with immediate grades. Results based on the English Expression Test showed that the control group was significantly better, though there was no significant difference between the two groups on the essay test.

In an experiment intended to examine creativity in the writing of tenth grade students, Jenks (1965) compared two methods. The first was the "Demopraxis Journal Method," which consisted of regular journal keeping that included five components: 1) an ideas list; 2) daily writing with three weekly essays focussed on a single topic, mood, or opinion; 3) a personal manual with corrections of errors noted by the writer or by members of a peer group; 4) a spelling list; and 5) extra-credit manuscripts. The second method was a regular course of study where students wrote one assigned theme per week and did not keep a journal. Experimental data derived from the Imaginative Stories Tasks of the Minnesota Tests of Creative Thinking showed that the journal method contributed significantly to creative development.

Since many of the studies I have reported here were conducted in rather short periods of time, evidence seldom indicates that any method being compared with another has any lasting effect. Many researchers report that significant differences might have become apparent had the treatment been carried out over a longer time. Smith"s (1974, see above) six-week post-experimental check is thus an exception worthy of replication. To cite another example, Burrus (1970) conducted a three year experiment with primary children, comparing two methods of teaching the mechanics of writing. The "traditional" method placed emphasis on a language textbook and models of correctness while the "functional" method emphasized the child's own language (i.e., stress on mechanics as determined by voice inflections) and emphasized writing as purposeful communication. Burrus found the functional approach statistically more significant in improving punctuation, capitalization, and spelling. Improvement in usage and sentence structure was slightly higher for the functional group, though not statistically significant. What is more important in this study, however, is the suggestion that attitudes formed in the functional group toward writing as a purposeful, real communication act directed toward peers may have had an impact on the improvement of certain writing skills. The Burrus study has too many uncontrolled variables for this causal relationship to be drawn with any real certainty; still, it does suggest a relationship between attitudes and achievement acquired in time which other experimental methodological studies need to investigate.

It is clear from many of the studies I have reported here that attitudes students form toward writing are not always considered in methodological

comparisons. Indeed, investigations into the relationships between techniques of composition teaching and learning and attitudes which foster improvement in composition pose many questions of a psycholinguistic nature which call for much needed research. What, for example, is the long-term effect on student motivation and performance of teacher-sponsored versus self-sponsored writing? Or how does having a genuine purpose for writing influence the development of writing abilities? And what is the impact of feedback from other than teacher-only audiences on student desire to communicate and communicate well? Finally, a research proposal made by Rohman and Wlecke in their study seems most appropriate here: researchers should seek "to define the precise relation of the journal--that is, the habit of private articulation--to the improvement of a student's attitude and performance as a writer" (1964, p. 108).

These kinds of questions view writing as a meaning-centered language process where motivation and attitudes enter into the writing process in as essential a role as do the writing "skills" most studies focus their attention on. The reciprocal nature of attitudes and performance is thus in need of more research which recognizes that the development of attitudes and abilities in writing takes time and that composition methods and approaches are truly "effective" only when their impact on achievement and attitudes is apparent long after treatment.

2. What do different kinds of students prefer to write about when relieved of the expectations and requirements of teachers and others?

Varon (1971) examined the content of unsolicited compositions written by fifth and sixth grade students in the years 1963-1968. She found that the major thematic category students preferred was abstract concepts such as love and hate. Other categories observed (in rank order) were: nature, activities, material goods, and humans. Varon also found the greatest use of human referrents in the children's writing was that of persons generally, followed by self, extra-familial, world, familial, fanciful, and no persons at all. Jobe (1974) found that when given freedom of choice in selecting topics, second, fourth, and sixth grade children chose fantasy, animals, and personality, in that order. Jobe also found that the major influence on choice of topic was internal (students' own ideas), followed by topics derived from personal experiences, and lastly books.

Bell (1971) examined 1,502 compositions designed to encourage free expression of the writing interests of high school students. He found that the interests most frequently expressed by the students (in rank order) were: education, our

society, life, sports, home, our world, people, experiences, and friendship. Bell also found that the students were more interested in writing about matters that they perceived as affecting their own lives and that they showed minimal interest in writing about such topics as animals, music, hobbies, travel, space, and literature.

Standish's (1970) informal investigation of high school student writing preferences was reported in the April, 1970 Arizona English Bulletin:

> Interested in discovering what kinds of composition assignments high school students preferred, Patricia Standish (Alhambra HS, Phoenix) asked 256 students to complete a brief questionaire. The response to item 1, "If you were going to be assigned a composition, which instructions would you prefer to follow?" revealed a preference for an unstructured assignment (an assignment which left the student free in choice of topic, audience, approach, style, or length) by more than 40% of the students. About 29% preferred the loosely structured assignment, while less than 13% favored highly structured assignments. Item 2 asked students, "If you were going to be assigned a composition, which type of topic would you prefer?" and students indicated preference for topics based on current problems (50%), as opposed to topics based on literature (20%), experience (12%), or the composition book (2%). Item 3 asked students, "If you were going to be assigned a composition, what type of writing would you prefer?" Students responded to item 3 by indicating a preference for expository writing (36%) over narrative (22%) or descriptive (15%) writing. That these 256 students preferred unstructured assignments is a little surprising. Many texts on writing note that structured topics give the young writer a sense of purpose and direction (p. 51).

In her investigation of secondary school students' choices of audience and topics, Koch (1976) found that when given free choice, girls chose mostly to write either to peers about personal experiences, or to family about personal feelings. Boys also generally chose to write about personal experiences, but not to the degree the girls did, and boys also chose a more diversified audience, one which included public figures and known adults as well as peers.

Future researchers might direct their attention toward the writing preferences of college students; content analyses and questionaire/inquiry techniques

may provide interesting data for determining the nature of preferred writing assignments. It may well be, for example, that part of the problem facing beginning writers stems from the conflict between preferred writing topics and imposed topics. Furthermore, the wide spread of preference reported in such studies as Standish's suggests a need for research which investigates whether providing a variety of topics and modes on a writing assignment affects the writing performance of students.

3. What are the sources of fear and resentment of writing?

I have considered this question separately from Questions One and Fourteen because it pertains to identifying sources of attitudes toward writing generally, whereas those questions pertained more to identifying attitudes formed as a result of specific techniques. Two recent studies investigated language apprehension as a possible source of fear and resentment. In a case study which examined the development of linguistic security and written fluency, Koch (1975) sought to facilitate linguistic security in college students through small-group interaction. Pre and posttest comparisons revealed that students involved with small group interaction valued their competence with language more, increased their written fluency, demonstrated greater cohesion in their writing, and had greater confidence in their ability to speak and write effectively. Brazil (1975) found similar results when he hypothesized that the doctrine of linguistic correctness causes linguistic insecurity. Working at the community college level, Brazil evaluated the overall effectiveness of two contrasting approaches to teaching freshman composition: 1) a dialect-acceptance, student-centered approach; and 2) a language-standardization, teacher-centered approach. Results favored the dialect-acceptance approach: students made greater gains in fluency and in overall writing effectiveness.

A project by Daly and Miller (1975) came closer to identifying the sources of fear and resentment than did either the Koch or Brazil studies. Daly and Miller reported on the initial development of an instrument for identifying apprehensive student writers. The researchers developed a twenty-six item Lickert-type scale which was designed as an attitudes survey and was tested for validity and reliability. Students answering the survey are instructed to indicate degrees of agreement or disagreement to such statements as the following:

--I avoid writing.

--I am afraid of writing essays when I know they will be evaluated.

--My mind seems to go blank when I start to work on a composition.
--I expect to do poorly in composition classes even before I enter them.
--I have a terrible time organizing my ideas in a composition course.

In their investigation of academic decisions as a function of writing apprehension, Daly and Shamo (1978) hypothesized that college students who are highly apprehensive about writing will find desirable majors which they perceive to be low in writing requirements and that students with low levels of apprehension will find desirable majors with high writing requirements. They also hypothesized that college students' choice of major is affected by their apprehension of writing requirements. The procedure followed was to give four questionaires to 181 undergraduate students which sought to measure 1) writing apprehension; 2) perceived writing demands in 28 academic majors; 3) desirability of the 28 majors; and 4) actual major choices. The data supported both hypotheses: the desirability of certain majors is affected by the level of apprehension about writing requirements; and, actual decisions on majors reflect apprehensive students' tendency to choose majors which they perceive as having low writing requirements. The authors concluded that "Highly apprehensive people find writing unrewarding or even punishing. As a consequence, they seek to avoid situations where it is required. Low apprehensives are just the opposite" (p. 124).

Further research in student writing apprehension might expand on the pioneering work of Daly and Miller and Daly and Shamo to a more precise identification of fears and resentments. Longitudinal and case-study procedures might provide information regarding the natural history of reluctant writers. In addition, inquiries into previous school experiences with writing could provide much valuable insight. Related research issues were suggested by Rohman and Wlecke in their study (1964); they encouraged researchers to:

> Seek to throw more light on the relationship of a person's self-image to his behavior as a writer. What might the validity of a self-image be as a predictor of successful behavior as writer?
>
> Seek to uncover to what degree our national "neurosis" about "correctness" has inhibited or encouraged better performance among student writers. What kinds of attitudes, especially in the elementary grades, would provoke better writing among young people? (p. 107).

Finally, I would add that in recent years, an enormous amount of research in

dialect variation has become available which can be of much value in attempts to discover the sources of fear and resentment of writing. Thus, research into the relationship of dialect variation and apprehension in writing shows much promise.

4. How do the kinds of writing which adults compose vary with their occupations and other factors?

Very little has been done in this area. One study by VanFleet (1969) sought to develop guidelines for the content of a college report-writing course by gathering data through the analysis of report-writing textbooks and by interviewing report writers and report readers at two companies. The investigator found that the potential report-writer should be able to do the following: 1) write correctly, concisely, clearly, and precisely; 2) define and analyze report problems; 3) outline, organize and write reports of various lengths and degrees of complexity and formality; 4) develop particular report sections, such as introductions and summaries; 5) present data graphically and verbally, and distinguish between relevant and irrelevant details; and 6) follow instructions pertaining to report make-up, physical presentation, and graphic construction. Further research into other areas of specialized writing may be very useful to teachers and curriculum designers of specialized or technical writing programs.

5. What is the effect on writing of having the student compose his paper for different kinds of readers?

Most of the research relating to this question deals with peer-audience as one of the elements in a total methodological approach (see, for example, Laguna, 1972 and Ford, 1973). A study by McClatchey and McClatchey (1970), however, seems to be in direct response to this question in that peer-audience was the variable in the project. After conducting a pilot study with twenty-nine students, the actual study was begun with fifty-nine freshman composition students at a university. Students in four classes each wrote four themes. Two of the themes were handed in to the teacher to be graded and commented on. The third theme was dittoed and distributed in class groups, taken home and commented on by peers, discussed in class, and then returned to the writers. The fourth theme, exchanged between pairs of students rather than in groups, was commented on, discussed, and returned to the writers. Next, all of the themes were evaluated by a group of outside raters on the basis of interest, construction, and

organization. A letter grade was assigned for each theme. The results indicated that average and above-average students did better when writing for the teacher. Below-average students, however, did better when writing for their peers. In their conclusions, the investigators suggested that below-average writers make low grades in writing partly because of tension over grades and because of inability to "psyche out" the teacher's wishes. "In any case," they write, "it is apparent from the results of this research that most below-average students, and some who are average or above-average, would profit from writing, at least occasionally, themes that are directed towards their fellow students" (p. 23).

McClatchey and McClatchey call for replication of their investigation into the impact of audience on student writing, and it would appear from the paucity of studies done in this area that there is still much need for such studies. In addition, researchers might consider investigating what effect audiences other than teachers and peers might have on student writing. For example, how is student writing affected when the audience is the school or the community at large or professional individuals and groups? While it is not uncommon for students at all levels to engage in writing for audiences of this sort, there has been virtually no research to estimate the effectiveness of such practice.

6. At which levels of maturation does it seem appropriate to introduce the various modes of discourse--narration, poetry, drama, exposition, argument, and criticism?

Problems inhere in a proper interpretation of this question. For example, are we to take "appropriate" to mean a value judgement, as in "Do children at a certain level need to be introduced to the elements of drama, or to methods of exposition?" Or are we to interpret it in a developmental sense, as in "Can children at a certain level learn techniques of criticism?" Appropriateness, in either sense, has not been dealt with in the research. Another problem lies with the phrase "to introduce." Does this mean formal introduction to the modes of discourse? If so, then the reader can look to the methodological studies which involve introducing one of the modes of discourse that I summarized earlier in this essay. But if "to introduce" means informal introduction, then the question is even more problematic, since children and adolescents of all ages are exposed to and use in their daily language encounters all of the modes of discourse--they narrate, dramatize, argue, criticize, and so forth. The question, then, is too ambiguous for any precise grouping of research studies under it. It calls for a kind of broad developmental research which has not been done.

Researchers may be better off pursuing the type of related issue posed by Lundsteen (1976) when she suggests that we "look to what children can do before we talk about what teachers should do" (p. 17).

7. What is the relative effectiveness of writing shorter and longer papers at various levels of maturity and proficiency?

Researchers have not investigated the effectiveness of composition length either at levels of maturity or at levels of proficiency. A related matter, however--writing frequency--has been looked into. Hunting (1967) reviewed five studies which consider whether increased writing practice improves writing. He concluded that mere frequency of writing without accompanying instruction or motivation will not improve writing. Hunting called for more research in this area, particularly investigations into the relationships between improvement and functional writing assignments (i.e., writing that is meaningful and challenging, as opposed to writing that is merely practice).

Sherwin (1969) has a more comprehensive summary of research into the benefits of writing practice. From his overview of this research, he concluded that "merely increasing the number of assignments will not improve the quality of writing" (p. 157). The implication drawn from research on writing frequency seems to suggest that increasing the length of compositions will not improve the quality, though at present we have no research to support or disprove this assertion.

8. At which levels of maturation does it seem appropriate to introduce the various rhetorical elements of writing?

This question poses the same problems as those I discussed under Question Six. What does "appropriate" mean? Does "to introduce" mean formal introduction; or, in this case of rhetorical elements, does it mean raising to consciousness that which people do naturally, such as coordination, subordination, transition, etc.? As I said in my discussion of Question Six, the question is too ambiguous for any precise grouping of research studies under it. However, the reader can look to some of the studies cited under other questions here which deal with the introduction of rhetorical elements to students, such as Troyka (1973) and Burhans (1968) under Question One, and Fichtenau (1968) and Gozemba (1975) under Question Eighteen.

9. What are the effects of various kinds and amounts of reading on the quality and kinds of writing a person does?

There have been many investigations into the relationships between reading and writing. Lacampagne (1969), in his examination of approaches and attitudes toward writing, surveyed over 1,000 twelfth graders who had been rated either superior or average in writing performance. Among his findings were some correlations between extensive reading background and superior writing performance. Similarly, Donelson (1967), in his investigation of 251 tenth graders, found that effective writers were more widely read and owned more books than ineffective writers. Maloney (1967) tried to identify superior and poor ninth grade writers of expository prose and the qualities that were characteristic of the superior writers. The researcher found that superior writers came from homes where parents bought books regularly and that the students read often and scored high on reading tests. Barbig (1968), in a similar study with ninth and twelfth graders, found that the poor writer watched more television and read fewer books than did more successful writers. Nakamura (1970) investigated the relationship between the amount of reading and the quality of writing done by 30 tenth grade boys. As might be expected, he found that the writers who read more wrote better. Students considered good or fair writers owned more books, read a greater percentage of the books owned, and were assigned and completed more outside reading in school than did the poorer writers. In addition, Nakamura found a close relationship between availability of magazines and newspapers in the home and the students' ability to write well. Schneider's study (1970) was an attempt to locate specific correlations between reading and writing skills. She investigated whether emphasis on reading skills leads to improved writing in a college remedial writing course. Both experimental and control groups followed the same conventional classroom method, except that the experimental group was taught developmental reading in addition to the writing activities. Results were mixed, but in favor of the students in the experimental group: they gained on three posttest measures of writing and reading abilities, though only two measures were statistically significant. The author concluded that emphasis on reading skills can lead to improved writing.

In their study involving 71 remedial English teachers and 2,066 college students, Bossone and Troyka (1976) compared with other teaching approaches an experimental program correlating reading and writing instruction in order to improve expository writing. The results indicated that 80% of the experimental groups, but only 45% of the control groups improved their writing by the end of the semester. In another investigation, the relationship between attitudes toward reading and success in writing was studied by Steidle (1977). Using 920

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students from grades four, six, nine, and twelve, the researcher correlated scores on the Diederich Composition Rating Scale with measures of specific attitudes toward reading. Steidle found that student attitudes toward reading significantly predicted success in writing.

Thomas' (1978) findings disagree with most of these reading/writing correlation studies. He used 405 college freshmen to determine the relationship between reading and writing achievement. Measurement was through the subtests for comprehension and vocabulary on the SAT, through a reading questionaire, and through one 500-word writing sample rated for overall quality and sentence maturity. Thomas found little relationship between a student's ability to read and his ability to write. Nonetheless, it would appear from most of this type of research that a close connection between reading and writing does exist. None of the studies cited here, however, attempts to articulate the causes of this relationship. All we can be sure of at this point is that extensive reading contributes to success in writing. Why this is so is a rich area for further research.

10. What are the direct and indirect effects of particular sensory experiences and guided observation upon writing?

Ewing (1967) investigated the effect of various stimuli on the writing produced by third graders. Four sensory stimuli were used: 1) auditory (listening to a musical selection); 2) visual (viewing a film without words); 3) motor (drawing a picture); and 4) minimal stimulus (being asked to write a story). The students wrote a composition after each of the four stimuli. Five judges ranked the compositions according to overall quality. The compositions judged highest in quality were those written with minimal stimulus, followed by those written under auditory, visual, and motor stimuli. King (1973) sought to determine whether increasing the number of types of sensory stimulation prior to a writing experience would help fourth, sixth, and eighth grade students to write more creatively and to write longer stories. The four stimuli were: 1) aural; 2) aural and visual; 3) aural, visual, and tactile; and 4) aural, visual, tactile, olfactory, and gustatory. The results were inconclusive.

Four related studies focussed on sensory stimuli. Golub and Frederick (1970) compared the differences in the writing of 160 fourth and sixth graders when they were exposed to two variables: 1) contrasting visual stimuli (black and white versus colored pictures; and, abstract versus concrete pictures); and 2) varying instructions on how to write (specific versus general). The

researchers found that black and white pictures seem to be slightly superior to colored pictures for generating more complex and more diverse linguistic structures. They also found that abstract pictures were more difficult to write about than concrete pictures, which produced more modifying clauses. However, there was no statistical significance for either of these findings; and the variation in instructions had no effect on the students' writing. Donlan (1976) worked with eleventh and twelfth graders to determine the effect of four types of music on the students' spontaneous writing. He found that unfamiliar vocal music interfered more with the quality and quantity of student writing than did familiar vocal music. Kafka (1971) investigated the effectiveness of three sensory stimuli in helping intermediate students express themselves in writing narrative compositions. He found that students exposed to the three stimuli--visual, aural, and tactile--before writing, did not demonstrate better quality in their writing than a control group which wrote without being exposed to the stimuli. In fact, the control group wrote better compositions. Finally, Wilson (1976) asked whether sensory stimuli or pictures of sensory stimuli have greater impact on high school student perception as evidenced by degrees of descriptiveness and interest generated in their writing. He found that direct sensory stimuli do not generate greater descriptiveness or interest.

Wilson's study, like the others cited here, point to the general inconclusiveness among studies done on sensory stimuli. Too much depends on other variables, such as topic, environment, mode of discourse, and, most importantly, individual student sensitivity to stimuli. Kafka's suggestion that perhaps children write more effectively from internal stimuli than from external stimuli supports the notion that sensitivity to stimuli of whatever sort is far too individualistic for researchers to come to any firm agreement about the relative effectiveness of one stimulus over another.

11. At what stages of maturity do students spontaneously seek specific help in improving particular aspects of writing, such as specificity of details, transitions, parallel structure, and metaphor?

This question presupposes that there is a stage or stages of maturity at which students develop such highly motivated self-direction that they spontaneously grapple with these problem-solving aspects of writing, when in fact, students at all levels can acquire such self-direction. The essential question, then, has less to do with identifying some level of maturity and more to do with

why and how a self-generated search for help develops. The research studies I cited under Question One--those dealing with attitudes--are the closest we have come to answering this question through research. Hence, there is still need for research in response to this question, though I believe it would be more accurate to rephrase it as follows: "Under what circumstances, environments, approaches, motivational stimuli, etc., do students at different levels of maturity develop a self-directed problem-solving orientation toward writing?"

12. At which levels of maturity can particular aspects of writing most efficiently be learned?

This question is similar to Questions Six and Eight in that the many ways of interpreting "aspects" prevent any specific grouping of research studies here. Perhaps the best answer research could provide in response to this question would be that some students, at various levels of maturation and under various learning conditions, can learn some aspects of writing. That is to say, the question poses a broad developmental issue that so far has been approached only in studies of isolated aspects of writing; and the results of these studies do not lend themselves to the sweeping conclusions this question seeks. Nonetheless, valuable insight could derive from research which examines developmental aspects of children's and adolescents' writing. As Lundsteen (1976) points out, there has been some theoretical work concerning "characteristics of children's composition according to increases in age. For example, there appear to be progressions in plot construction, characterization, choice of revealing detail, sequencing, support of main ideas, ability to make choices in forming and arranging sentences, coordination, subordination, and use of transitions (Burrows, 1960; Hunt, 1965). The compositional thought of children moves from memory of direct, sensory experience to pictured images of concrete objects held in inner speech thought (Vygotsky, 1962). The child's written thought moves from a few words to whole incidents and finally to the complex ordering of experience through various forms of literature, such as the folktale, fable, myth, and fantasy (Nebraska Curriculum Development Center, 1966)" (Lundsteen, p. 24). Experimental support for hypotheses such as these may provide some answers to when students can learn what.

13. Does the oral reading of rough drafts help the elementary child strengthen "sentence sense"? How does it?

Mills (1970) compared the effects of oral proofreading and silent proofreading of rough drafts of compositions by 26 sixth graders. Students wrote

pairs of narratives; one was read orally for correcting errors in capitalization and terminal punctuation, and the other was read silently for the same corrections. Mills found a significant difference in correcting capitalization errors which favored the oral proofreading method, but found no significant difference between the two methods in the correcting of terminal punctuation. The researcher concluded that children of this age can benefit from both types of proofreading. Likewise, Pechar (1976) investigated the effectiveness of having students read their papers aloud to the teacher in a conference. One hundred twenty-three high school students divided into experimental and control groups for twelve weeks followed the same procedure in the Communication Skills course, except that the experimental groups followed the oral proofreading technique. Post-tests showed no significant differences between the two groups on either the English 2600 tests, the SRA spelling tests, or on the writing sample, grading of mechanics.

15. What procedures of teaching and learning composition are most effective for pupils of low socioeconomic patterns?

There has been little research in composition specifically directed toward students of low socioeconomic patterns. An exception is Fry (1971), who investigated the effects of two variables upon the writing of 160 ninth grade students of low socioeconomic backgrounds. The two variables were: 1) traditional versus transformational grammar; and 2) direct versus indirect methods of teaching. (The direct method was concerned with the correction of specific errors while the indirect method was concerned with generalizing the grammatical elements without emphasizing specific errors). Fry found that neither the proportion of well-formed sentences nor the average structural complexity of sentences was affected by either grammatical approach, or by either method of teaching. Unlike Fry, however, most researchers are more concerned with their subjects' achievement level than with their socioeconomic level. That being the case, useful research could be done first, on what causal relationships, if any, exist between socioeconomic background and achievement; and, second, on strategies for the teaching and learning of composition which are informed by such research in causal relationships.

16. What procedures of teaching and learning composition are most effective for pupils learning to write English as a second language?

Much of the research in ESL in recent years has been concerned with practices based on comparative learning theories, such as those described by John Carroll as the audiolingual habit theory and the cognitive code-learning theory (Carroll, 1971). However, very little of this research consists of empirical studies. Morrisroe and Morrisroe (1972), in their survey of 239 articles published between 1961 and 1968 which deal with ESL generally, found only seventeen that could be described as empirical research. "Many articles" they note, "dealt with problems in second language teaching, but few dealt with proven ways to solve them" (p. 50). The situation is even worse for research in ESL directly concerned with the teaching and learning of composition. For example, Dykstra and Paulston (1967) reported on a programmed method of improving composition skills of foreign students which involved structured language manipulations of model passages. An experiment is included in the report, but it is not described in any detail, and no statistical results accompany it.

Much research could thus be done in the area of composition for students learning English as a second language. Studies such as the one by Friend (1970) could be replicated. Friend examined relevant theories and research in linguistics, psychology, and composition theory as they relate to the construction of writing programs for students of English as a second language at the intermediate and advanced levels. She then presented a writing program based on such information. While Friend's is not an empirical study, it is a sound example of the kind of investigation that could be replicated on an empirical basis. Readers interested in this area of research in ESL should consult Friend's bibliography as well as the bibliographies appearing in Carroll (1966), Croft (1970), the 1968 Index to ERIC Documents in Linguistics and the Uncommonly Taught Languages and Selected Bibliographies of Related Titles (1969), A TESOL Bibliography (1971), and studies indexed in Language and Language Behavior Abstracts.

17. Can study of the newer types of linguistics help writers?

Research into the relationship of modern linguistics and writing has taken two directions. On the one hand, some studies examine whether instruction in linguistics improves writing. Such studies, thoroughly summarized in Sherwin (1969), Blount (1973), and Haynes (1978), do not, as Sherwin concludes, "encourage the belief that a linguistic approach or linguistic knowledge is more effective than a grammatical approach or grammatical knowledge" (p. 156). Sherwin's statement echoes that made six years earlier in the Braddock Report on research in the teaching of traditional grammar: "the teaching of formal

grammar has a negligible or, because it usually displaces some instruction and practice in actual composition, even a harmful effect on the improvement of writing" (1963, pp. 37-38). The need for any further research in this area is unlikely.

However, a second direction has emerged in investigations into the relationship of modern linguistics and writing improvement, namely, studies in sentence combining. Miller and Ney (1968) worked with fourth graders for an entire year, using oral and written drills in sentence combining, along with choral readings. Posttest results favored the experimental oral/written group. These students wrote more words per writing assignment, used the sentence structure practiced in the treatment more, and used a greater proportion of complex sentences than did the control group. Mellon (1969) found that the syntactic fluency of ninth graders can be enhanced through the study of transformational-generative grammar along with the exercises in sentence combining, though it was not clear which affected student writing--the grammar instruction or the sentence combining exercises. O'Hare (1971) replicated the Mellon study but did not include any instruction in transformational-generative grammar. His work with 300 seventh graders for an entire school year focussed on intensive practice in sentence combining. At the end of the treatment he found that the students in the experimental groups were writing sentences more syntactically mature than the sentences produced by students in the control groups and that the overall quality of the experimental groups' compositions was also superior to the control groups' compositions.

Other studies which replicate the sentence combining experiments (Hunt and O'Donnell, 1970; Oberchain, 1971; Fisher, 1973; Ofsa, 1974; Bivens and Edwards, 1974; Combs, 1975; Levine, 1976; Klassen, 1976; Combs, 1977; and Pedersen, 1977) come to similar conclusions--that sentence combining practice improves the syntactic maturity of students in the experiments. Some researchers do not agree with these conclusions (Green, 1972; and Ney, 1976), while still others take the bulk of these findings with considerable skepticism (Marzano, 1976; and San Jose, 1978). Nonetheless, enough evidence has been gathered from enough research to lend much support to the effectiveness of sentence combining activities. Stotsky (1975), for example, in her comprehensive overview of experiments in sentence combining, concludes that these activities will promote syntactic maturity and will improve the overall quality of student writing.

18. Can formal study of rhetorical theory or of logic help writers?

Fichtenau (1968) examined the growth in written composition of academically above-average children in grades three through six who were taught the concepts of invention, arrangement, and style. The researcher found that the only significant difference in writing skills at posttest occurred at the third grade level. He concluded that there is little relationship between teaching these selected rhetorical concepts and the improvement of written composition at these grade levels. Gozemba (1975) asked whether rhetorical training through visual media (slide-tape programs, films, and photographs) would be more effective than rhetorical training through verbal means alone in improving four writing skills of college freshmen: 1)ability to clearly state a thesis; 2) ability to carefully state an argument; 3) ability to deliberately substantiate the argument with examples; and 4) ability to skillfully express ideas with varied sentence structure. The researcher found that training through visual media was extremely effective: the gains of the experimental group in all four writing skills were nearly double those of the control group.

Some researchers have focussed strictly on invention. Rohman and Wlecke (1964), as I reported under Questions One and Fourteen, found that college sophomores in a treatment group which emphasized concept formation in the prewriting stage wrote significantly better themes than did students in the control group which did not focus on prewriting concept formation activities. Young and Keon (1973) investigated whether instruction in the tagmemic discovery procedure improves student ability to inquire into problems and communicate the results well in writing. The researchers used twelve university seniors who were tested on rhetorical skills. The results showed that the students improved in their ability to analyze problems and in the quality of their writing; that is, they wrote with greater understanding and persuasiveness. Odell (1974) used freshman composition students for one semester in an experiment which also emphasized tagmemic discovery procedures. No control group was used; rather, the researcher predicted the changes that would appear in students' writing from pretest to posttest and determined how likely it was that these changes could be attributed to chance. Because of the nature of this research design, the results must be taken as tentative; posttest analysis of essays revealed that students were in fact using at least some of the operations that they were taught in the course. I should also note that Hoyer (1974) has compiled a useful bibliography on the invention process in composition and on the act of creativity. She presents four sections on the following: 1) general works on invention; 2) taxonomic heuristics; 3) discovery through persona; and 4) multi-observational approaches. Each section is divided into subsections on theory, practice, and research.

Three studies considered the effectiveness of generative rhetoric in improving writing. Hardaway (1969) investigated whether generative rhetoric is more effective than traditional rhetoric in improving the writing skills of college freshmen. The experimental group received instruction in generative rhetoric of the sentence and paragraph, read from models, and did exercises. The control group analyzed sentences and paragraphs by focussing on loose, balanced, and periodic styles; types of sentences (simple, compound, etc.); and topic sentence, unity, coherence, and emphasis in the paragraph. Hardaway found no significant differences between the two groups, though mean scores for the experimental group were slightly higher in the areas of focus and structure, content, sentence construction, fluency, and general impression. Miller (1972), in his experiment involving college students, investigated what effects the Christensen Rhetoric Program has upon student attitudes toward composition and upon the use of free modifiers in their writing after a lapse of time from instruction. He found that the program did not affect attitudes toward composition, but he did find the program superior to traditional methods in helping students to expand ideas in sentences and paragraphs and to continue to do so after leaving instruction. Similarly, Hazen (1972) compared the effectiveness of the Christensen Rhetoric Program with a traditional write-revise approach at the community college level. Ten writing skills were the criteria for improvement: organization, ideas, development, usage, punctuation, tone, style, reasoning, sentence structure, and spelling. Hazen found positive results and concluded that the Christensen Rhetoric Program will promote writing skills at this level superior to the skills of students taught by the write-revise approach.

In a related study, Sanders (1973), working with junior college freshman composition students, compared James Kinneavy's "aims" approach (which stresses expressive, literary, persuasive, exploratory, scientific, and informative aims that govern the choices writers make in the process of writing) with a traditional "modes" approach (which stresses techniques relevant to the various modes of exposition). Though both groups improved their writing, Sanders found no significant difference between them resulting from either approach.

Finally, Klein and Grover (1970) investigated whether instruction in symbolic logic would effect improvement in composition and logical sentence analysis for students in grades nine through twelve. The researchers found that instruction in logic has a significant effect on sentence logic analysis but does not contribute to improvement in students' essay writing skills.

A valuable suggestion for further research in this area was proposed by Braddock (1969) when he stated that "It would be interesting for someone to do a critical synthesis, 'What Research in Reading Suggests to Writers,' which may get at the

effect of rhetorical considerations on various types of readers, not merely on composition teachers or raters--the usual yardstick for this kind of research" (p. 451).

19. How is writing affected by extensive study and imitation or parody of models?

Pinkham (1968) emphasized the characteristics of "good writing" in an experiment involving 180 fifth grade students from urban and suburban areas for a fourteen week period. Students in the experimental group followed procedures based on stressing the characteristics of "good writing" found in selections from children's literature, along with actual writing and revision. The control group also wrote and revised, but did not receive emphasis on the model characteristics. Pinkham's results indicated a significant difference in favor of the experimental group on the STEP writing test. On the STEP essay test, however, Pinkham found no significant differences between the groups, though there was a positive gain for students from the urban area. Calhoun (1971) investigated the effect of analysis of essays on reading and writing abilities of college composition students. Sixty-four students in the experimental groups analyzed essays through a series of ten lessons geared toward articulating the rhetorical techniques used in the readings. Fifty-eight students in the control groups had no such systematic instruction in analysis, though all other elements of instruction were the same for both groups. The researcher found that systematic analysis of rhetorical techniques contributes to an increased awareness of those techniques when they are encountered in reading. But no evidence was found to indicate any transfer of this awareness to writing; that is, there were no significant gains for either group on the compositions rated as posttests.

An interesting study related to essay analysis was conducted by Stewart (1966). From a group of 77 anthologies used in freshman composition courses across the country, he analyzed the underlying rationales of the anthologies and the rationales of directors of freshman composition programs who use these readers. He then catalogued the rationales and compiled the following list of those most frequently underlying the texts and their uses:

--texts offer advice for the beginning writer;

--texts offer the study of language as the proper content of a composition course;

--texts stimulate interest in topics for writing;

--texts offer prose models;

--texts offer critical reading and thinking which lead to better writing.

Of the five rationales, the last two were the most popular. Stewart challenged the imitation of models rationale by citing the difference between analysis (the picking-apart of a reading selection) and synthesis (the putting-together act of writing) and then asked what goes on in the student's head that allows him to make the transference from analysis to synthesis. He saw, finally, three functions the texts serve: 1) they add to a liberal education; 2) they expose students to good writing; and 3) they are a useful introduction to methods of literary criticism.

Since the use of models in the teaching of writing is such a widespread practice, it is surprising that more basic research has not been done in this area. Stewart's challenge to the imitation of models rationale raises fundamental issues which researchers ought to look into: 1) what is the process whereby the analysis of reading selections influences the production of writing?; and 2) to what extent is the imitation theory compatible with research into language processing?

20. What forms of discourse have the greatest effect on other types of writing? For example, does writing poetry help a writer of reports?

Only one study examined the transfer potential between forms of discourse. Shapiro and Shapiro (1971) investigated the suggestion that student improvement in writing poetry would result in improvement in writing prose and in improvement in student attitude toward literature generally. The researchers used 82 fourth graders in metropolitan schools for six weeks. Procedures followed in the experimental group consisted of activities related to the study of poetry through studying poems, listening to poems, and writing poems. Students in the control group used the Roberts Series along with the same number of writing opportunities as the students in the experimental group. Evaluation of post-treatment writing samples was based on a rating scale which assessed: 1) unity of thought; 2) organization and fluency; 3) opening and closing sentences; 4) originality and imagination; and 5) emotional appeal. Results favored the experimental group on poetry writing, prose writing, and attitudes toward literature. Among their conclusions, the researchers felt that the results favored

the experimental students because of the freedom and scope poetry provides for linguistic expression and because of the provision of an alternative mode for self-expression through language.

The Shapiros' conclusion echoes one of the implications Burhans (1968) drew from his experiment on the college level: "Interestingly enough, students who do well even in the conventional composition program have quite often had high school courses in 'creative' writing. Our study indicates that they do well not because training and experiences in writing fiction and poetry help them specifically with the problems of exposition but because in 'creative' writing courses they have become personally and subjectively involved in and committed to the processes of writing itself, and this involvement carries over into every other kind of writing they do" (p. 37). Burhans' statement suggests at least two possibilities for further research in this regard: 1) how does personal involvement affect the written product?; and 2) what elements of the process of writing in one form of discourse transfer to writing in another form?

21. What is involved in the act of writing?

22. How does a person go about starting a paper? What questions must he answer for himself?

A number of researchers have attempted to characterize elements in the composing process. Emig (1971) used a case study method to examine the composing processes of 8 twelfth graders. Students composed themes aloud and provided autobiographies of their writing experiences. From her observations and from the data collected from the writers, Emig constructed an outline of the composing process along with a narrative account of the steps in that process. She found that the students engaged in two modes of composing. First, the reflexive, characterized by 1) focus on the writer's thoughts and feelings; 2) sense of a self-directed audience; 3) affective exploration; and 4) a personal approach. Second, the extensive, marked by 1) focus on an other-directed communicable message; 2) cognitive exploration; and 3) an impersonal, reportorial approach. Emig found that the composing process for these two modes is further characterized by

> processes of different lengths with different clustering of components. For the twelfth graders in this sample extensive writing occurs chiefly as a school-sponsored activity. Reflexive writing is a longer process with more elements and components than writing in the extensive mode.
>
> Reflexive writing has a far longer prewriting period; starting,

stopping, and contemplating the product are more discernible moments; and reformulation occurs more frequently. Reflexive writing occurs often as poetry; the engagement with the field of discourse is at once committed and exploratory. The self is the chief audience--or, occasionally, a trusted peer.

Extensive writing occurs chiefly as prose; the attitude toward the field of discourse is often detached and reportorial. Adult others, notably teachers, are the chief audience for extensive writing (p. 91).

Two researchers conducted studies based on Emig's model of the writing process and on her modes of composing. Metzger (1976) observed the composing processes of three students--a seventh grader, a tenth grader, and a college student--in eight stages of the composing process: prewriting, planning, starting, following a program of style, reformulating, stopping, contemplating, and composing silently. She found that these students do no planning, start easily, give more attention to technical matters than to content, show syntactic immaturity, omit words and phrases, and do not revise. Metzger concluded that students perceive teachers to be primarily editors and proofreaders and find little enjoyment in writing. In another case study, Brozick (1976) investigated the composing behaviors and the cognitive strategies (focus, contrast, classification, sequence, change, and physical context) used by 4 twelfth grade students of distinct personality types: 1) sensing-feeling; 2) sensing-thinking; 3) intuitive-feeling; and 4) intuitive-thinking. As part of their regular English class, each student wrote four themes--two "reflexive" and two "extensive." After each writing, the students were interviewed as to composing process and cognitive strategies. Among his results, Brozick found that 1) the composing behaviors for reflexive and extensive writing differ considerably; 2) the students' personality type, purpose, and sense of audience govern the choices of cognitive strategies; 3) extensive writing restricts planning behaviors and use of cognitive strategies; and 4) reflexive writing provides the most opportunity to explore needs and interests.

In his profile of the composing process of a twelfth grader, Mischel (1974) also collected data through interviews with the student about his writing and about the composing process. The writing was essentially narrative and was done in forty-five minute sessions, though no specific time limit was set. Mischel found that the student started by thinking out what he wanted to say before saying it. Then he just began writing and proceeded in a linear manner. There was very little prewriting activity, nor was there any planning on paper--

all was mental. During the physical act of composing, the observer noticed little more than the student verbalizing his thought, then writing it down, while occasionally hesitating over a word or phrase. The student paid little attention to correcting mechanical errors; his focus was on meaning and plain expression, though he did do some rereading and revising later.

Graves (1975) examined the writing processes of seven year-old children. He too used a case study method based on analysis of children's writing, interviews with the children on their views of their own writing, as well as interviews with other children on their concepts of a good writer. Graves' findings in regard to learning environments present significant implications for classroom practice:

1) Informal environments give greater choice to children. When children are given choice as to whether they write or not as to what to write [sic], they write more and in greater length than when specific writing assignments are given.

2) Results of writing done in the informal environments demonstrate that children do not need motivation or supervision in order to write.

3) The formal environments seem to be more favorable to girls in that they write more, and to greater length, than do boys whether the writing is assigned or unassigned.

4) The informal environments seem to favor boys in that they write more than girls in assigned or unassigned work.

5) In either environment, formal or informal, unassigned writing is longer than assigned writing.

6) An environment that requires large amounts of assigned writing inhibits the range, content, and amount of writing done by children.

7) The writing developmental level of the child is the best predictor of writing process behaviors and therefore transcends the importance of environment, materials and methodologies in influence on children's writing (p. 235).

Sawkins (1971) investigated the procedures 60 fifth graders used when writing narrative themes. The students were interviewed after writing two

compositions. Among her results, Sawkins found that better writers are more concerned with the content of their writing (ideas, organization) than poorer writers, who are more concerned with the mechanics of writing (spelling, punctuation, capitalization).

In related research into the composing process, Ney (1975) developed a model of the sentence combining operation in an effort to explain its effectiveness. Basically, Ney sees the mental operations of the sentence combining activity as one of raising to a self-conscious level of control "linguistic resources which are innate to the students" (p. 168). Once these resources are on a conscious level, the student can use them in his written performance.

Finally, Cooper and Odell (1976) investigated whether professional writers attend to the sound of their writing during the composing process. Eight subjects were used in this study--two university teachers and scholars, two columnists, two news writers, and two technical writers. The researchers found that the sound of these subjects' writing does not play a very significant role in their composing processes. Their main concerns (in rank order) were: 1) enabling their readers to understand with ease; 2) clear expression of their ideas; 3) appropriate style; and 4) the sound effect they imagined their writing would have on their audience. Conventional matters of correctness mattered little.

Examination of the composing processes of writers at all levels is a rich area for further research. Graves (1975) remarked that "future research in writing should continue to explore the feasibility of the case study method." He noted, in addition, that "Further studies are needed to investigate the developmental histories of different types of children in relation to writing and the writing process" (p. 241). Researchers might also use a model of the writing process such as Emig's (1971), which locates specific components in the process, in order to measure how variations in those components (e.g., assigned versus unassigned topics) affect the written product.

23. How does a writer generate sentences?

The vast amount of work done by linguists over the past two decades precludes any attempt on my part to identify the multitude of studies relating to this question. The interested reader need only consult the body of research by transformational-generative linguists on the concepts of competence and performance, surface and deep structure, and child language acquisition, to find a wealth of theoretical and empirical responses to this question.

24. Of what does skill in writing really consist?

The studies of the composing process which I presented above are attempts to make the kind of discoveries needed to provide some answers to this question. In addition to these studies are two by researchers who have attempted to identify specific "skills" employed by successful writers in the act of composing. Stallard (1972) examined the writing behavior of good student writers from a high school senior class. His data were based on observations made on students writing an expository essay under laboratory conditions. He found that good writers write slowly, take time to read segments of their work at intervals during the writing process, and read the final paper and revise it. They do not consider identifying a particular audience for their writing, nor do they demonstrate concern for planning the structure of paragraphs or the structure of the entire essay. We must keep in mind that Stallard's experiment was under laboratory conditions; hence the processes demonstrated may not be characteristic of less artificial situations. In a related study, Hooks (1972) sought to identify what elements of writing are considered most essential by professional writers. She collected data from written documents of Hemingway, Faulkner, Fitzgerald, and Thomas Wolfe and from criteria professional book reviewers use in their evaluation procedures. She found that the elements of effective writing include: 1) the view of composition is that of a total process; 2) the origin of ideas lies in the writer's background and personal experiences; 3) the purpose of writing is to communicate an idea to an audience; 4) the notion of audience determines language and style; 5) reading others' works and constant writing will develop style; and 6) revision is necessary for succinct presentation of ideas.

Lamberg (1977) approached writing "skill" by identifying the major process-related problems which prevent acquisition of academic writing skill. He worked with 192 students doing academic writing at a university writer's workshop during the years 1972-1975. His research team read student writing, teachers' comments on that writing, and course materials handed out to students, and discussed with students their perceptions of their problems. The researchers identified a number of major problems: 1) lack of self-management skills; 2) lack of a strategy for composing; 3) failure to follow directions; 4) poor organization; 5) weaknesses in content; 6) ineffective introductions; 7) ineffective proofreading; and 8) difficulty in understanding or accepting teachers' criticisms.

Further research into the "skills" or elements involved in writing might consider the questions proposed by Lundsteen (1976): "Would a child who has insight into the writing process do better in the long run? Would a longitudinal study show that ability to discuss the writing process is reflected in the quality of the writing, after all? Would the kind of writing involved make a difference in the relationship between quality of product and ability to discuss the process?" (p. 57).

As I have tried to point out here, researchers, intentionally or inintentionally, have pursued the questions first proposed in the Braddock Report, and, in doing so, have provided a wealth of insights and empirical results which is readily available to teachers, directors of writing programs, and other researchers. In addition, I have tried to indicate for researchers, as well as for graduate students who are interested in research, that there is much to be examined in the teaching and learning of composition at all levels, that opportunities for much needed research are plentiful. Finally, I wish to emphasize to teachers and directors that familiarity with and implementation of the findings of research constitute only one component of a comprehensive effort to build sound, intellectually rich composition programs. Since, in recent years, there has been a virtual explosion of knowledge in numerous fields--learning theory, language theory, and composition theory, to name just a few--research must be integrated with relevant theory (and successful pedagogy) if we are to build composition programs which are solidly based on the most recent available knowledge, both in theory and research, knowledge which must be considered in order to achieve intellectually informed programs.

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